the top A of the cambered structure formed by bending the first substrate **210**, the second substrate and the sealant **230** is unnecessarily located on the central line C of the cambered LCD panel, but can be located at any side of the central line C. Namely, the top A of the cambered structure is located at the right side of the structure as that shown in FIG. **2**H, or is located at the left side of the structure as that shown in FIG. **2**I. Moreover, a number of the top A of the cambered structure is unnecessarily to be one. In detail, the first substrate **210**, the second substrate and the sealant **230** can be bent to form two or more cambered structures, as that shown in FIG. **2**J.

FIG. **3** is a top view of a cambered LCD panel according to another embodiment of the present invention. Referring to FIG. **3** and FIG. **2**D, the cambered LCD panel **300** of the present embodiment is similar to the cambered LCD panel **200**, and a difference there between is that in the cambered LCD panel **300** of the present embodiment, a distribution density of a part of photo-spacers **340** close to the top A of the cambered structure is relatively great, and a distribution density of a part of the photo-spacers **340** apart from the top A of the cambered structure is relatively small. In detail, in the present embodiment, a distribution density of a plurality of first photo-spacers **340***a* configured in the first region S**1** is D**1**, and a distribution density of a plurality of second photo-spacers **340***b* configured in the second region S**2** is D**2**, wherein |D**1**/D**2**| is between about 1.125-about 20, and preferably |D**1**/D**2**| is between about 4-about 12.

It should be noticed that when a number of the second region S**2** is multiple, in the second region S**2** close to the first region S**1**, the distribution density D**2** of the second photo-spacers **340***b* is relatively high. Conversely, in the second region S**2** apart from the first region S**1**, the distribution density D**2** of the second photo-spacers **340***b* is relatively small.

In the present embodiment, a distribution density of a plurality of third photo-spacers **340***c* configured in the third region S**3** is D**3**, wherein D**1**>D**3**. Moreover, |D**1**/D**3**| is between about 1.125-about 20, and preferably |D**1**/D**2**| is between about 4-about 12. When a number of the third region S**3** is multiple, in the third region S**3** close to the first region S**1**, the distribution density D**3** of the third photo-spacers **340***c* is relatively high. Conversely, in the third region S**3** apart from the first region S**1**, the distribution density D**3** of the third photo-spacers **340***c* is relatively small.

When the cambered LCD panel **300** is bent to form at least one cambered structure, since the distribution density of a part of the photo-spacers **340** close to the top A of the cambered structure is relatively high, it can first confront the cell gap variation of a region around the top A of the cambered structure, so as to maintain a consistency of the cell gap of the cambered LCD panel **300**.

In summary, by adjusting the gaps between the photo-spacers and the opposite substrate or adjusting the distribution density of the photo-spacers, a gap between the photo-spacers close to the top of the cambered structure and the opposite substrate is adjusted to be smaller than a gap between the photo-spacers apart from the top of the cambered structure and the opposite substrate, or a distribution density of the photo-spacers close to the top of the cambered structure is adjusted to be higher than a distribution density of the photo-spacers apart from the top of the cambered structure, so as to maintain the cell gap of the cambered LCD panel. Moreover, bending patterns and a number of the tops of the cambered structure are not limited by the present invention, so that the cambered LCD panel of the present invention can be easily applied to different terminal products having different shapes.

It will be apparent to those skilled in the art that various modifications and variations can be made to the structure of the present invention without departing from the scope or spirit of the invention. In view of the foregoing, it is intended that the present invention cover modifications and variations of this invention provided they fall within the scope of the following claims and their equivalents.

What is claimed is:

1. A cambered liquid crystal display (LCD) panel, comprising:

a first substrate;

a second substrate;

a sealant disposed between the first substrate and the second substrate, wherein the first substrate, the second substrate, and the sealant are bent to form a cambered structure, and the first substrate has a first region corresponding to the top of the cambered structure and at least a second region located at one side of the first region;

a plurality of photo-spacers disposed on the first substrate and distributed between the first and the second substrate, wherein the photo-spacers comprise:

a plurality of first photo-spacers disposed in the first region, wherein a height of each of the first photo-spacers is H**1**, and a gap between each of the first photo-spacers and the second substrate being G**1**; and

a plurality of second photo-spacers disposed in the second region, wherein a height of each of the second photo-spacers is H**2**, and H**1**>H**2**, and a gap between each of the second photo-spacers and the second substrate being G**2**, wherein G**1**<G**2**; and

a liquid crystal layer disposed between the first substrate and the second substrate, wherein the photo-spacers and the liquid crystal layer are surrounded by the sealant.

2. The cambered LCD panel of claim **1**, wherein the first substrate has a pair of first long sides and a pair of first short sides, and the second substrate has a pair of second long sides and a pair of second short sides.

3. The cambered LCD panel of claim **2**, wherein the pair of first long sides and the pair of second long sides are arc-shaped, and the pair of first short sides and the pair of second short sides are linear.

4. The cambered LCD panel of claim **2**, wherein the pair of first long sides and the pair of second long sides are linear, and the pair of first short sides and the pair of second short sides are arc-shaped.

5. The cambered LCD panel of claim **1**, wherein an absolute value of a difference between G**1** and G**2** ranges from about 0.15 micrometer to about 8 micrometers.

6. The cambered LCD panel of claim **1**, wherein an absolute value of a difference between H**1** and H**2** ranges from about 0.15 to about 8 micrometers.

7. The cambered LCD panel of claim **1**, wherein the first substrate further has at least one third region located at another side of the first region, and the photo-spacers further comprise a plurality of third photo-spacers disposed in the third region, and a gap between each of the third photo-spacers and the second substrate is G**3**, wherein G**1**<G**3**.

8. The cambered LCD panel of claim **7**, wherein an absolute value of a difference between G**1** and G**3** ranges from about 0.15 to about 8 micrometers.

9. The cambered LCD panel of claim **7**, wherein a height of each of the first photo-spacers is H**1**, and a height of each of the third photo-spacers is H**3**, and H**1**>H**3**.

10. The cambered LCD panel of claim **9**, wherein an absolute value of a difference between H**1** and H**3** ranges from about 0.15 to about 8 micrometers.